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RURAL
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COLMAN'S RURAL WORLD.

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Established 1848.

ST. LOUIS, MO., WEDNESDAY, APRIL 4, 1900.

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GOLMAN'S RURAL WORLD

NORMAN J. COLMAN, Editors.

LEVI CHUBBUCK.

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Letters should be addressed to COLMAN'S RURAL WORLD, 72 Olive St., St. Louis, Mo. Advertising rates furnished on application. Advertisers will receive the RURAL WORLD gratis as the advertising medium of its class in the United States. D. A. Watts, Traveling Representative, P. O. address Lebanon, Illinois, will give prompt attention to requests for inspection of herds or advertising rates for sales.

On page three of this issue is a thoughtful article by Wm. Howard Phelps of Oklahoma on "Fruit Trees on the Roadside," to which we ask the attention of RURAL WORLD readers and invite their comments upon the suggestions made.

The following very complimentary notice of the RURAL WORLD is given by the "Central Baptist" of this city: "Farmers who would keep well abreast of the times in all agricultural matters can not afford to be without COLMAN'S RURAL WORLD, published in this city. Its columns are full of capital articles treating all subjects of farming, stock raising, and fruit-growing in a scientific and up-to-date manner. The matter is not thrown together in a careless way, nor collected from questionable sources, but is so carefully collected and well arranged as to make the RURAL WORLD indispensable to the farmer who wants to make the most of his high calling. In the advertising columns will be found announcements of all kinds and grades of stock, farming implements, and supplies, so that when in need of anything the farmer has but to examine the advertising department of this special offer. We hope to have 100,000 subscribers on our list for 1900."

PROF. STEIDMAN'S PAPER.

ARE WE GOOD FARMERS?

C. D. Lyon, in his article on this page, speaks of some cases of American farmers compared with whom the "wooden shod peasants" do not, in his opinion, suffer. We do not want to be understood as lacking in high appreciation of American farmers, yet it must be admitted that there are other points of comparison between American farmers and the wooden-shoe and other farmers of the Old World that are not favorable to us. It is true that many of the European farms are small, and much land is cultivated by hand labor, as Mr. Heaton pointed out in the RURAL WORLD of March 21, but the fact remains that the yields obtained are greater than are obtained by American farmers for the same crops, that one is forced to ask whether the French farmers have not been wise in putting "off the evil day of machinery" as long as they can. American farmers have made wonderful strides in the adaptation of machinery to farming operations, and are thereby enabled to handle large acreages and produce the enormous quantities of grain and meats which are being shipped abroad. But is this necessarily a mark of advanced farming? It is not, rather, hand farming, resulting as it does in countless "worn out" farms all over the land? Not only are American farmers supplying the people of other lands with food under a system of farming that is exhaustive of the soil fertility, but, what is far worse, we are growing corn, oil meal and cottonseed meal that are shipped across the Atlantic in ship loads for the use of English farmers in finishing their beef cattle for market and of Danish dairy farmers to feed their cows. So long as American farmers are producing an average of less than 25 bushels of corn per acre, 30 of oats, 14 of wheat, 12 tons of hay, and one-half bale of cotton, instead of two, three and four times the respective yields, as is possible, and we send a large part of these raw products with their content of soil fertility across the ocean to enable European farmers to convert into products for direct consumption and get the advantage of the fertilizing ingredients for their farms, we are little entitled to be regarded as good farmers. Let us look at the situation honestly, admit our faults, and if the farmers of any other land are farming with more intelligence than we are, go to them for information.

NATURE STUDY IN THE CITY.

PROF. L. H. BAILEY, Professor of Horticulture in Cornell University, addressed the St. Louis Pedagogical Society on the evening of March 29 on "Nature Study in Public Schools." He told an interesting and instructive lecture to one who has ever heard Prof. Bailey would question for there are few public speakers who have equal ability with him to interest an audience in so pleasing a manner.

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If you want to see an example of the disgusted and disgusting grumbler find one who has run his acres to grain for 20 years, sold the fertility of his farm to his banker, the grain dealer, paid part of his accumulated bills and is now kicking about farming not paying. Guilles have formed and carried the better part of said farm farther toward the Gulf; hedges are towering heavenward and shading and sapping the life from many rods of his farm and yet he "cusses" the "government" for it all, while his time is spent in luxurious idleness.

Show me a man who works and I'll show you a farmer who is making money and not doing much kicking, but show me a man who spends his time in pointing back to his "French" or "English" ancestry and who lives on theories, or McIawber like, expecting something to turn up, and I'll show a farm that needs a "farmer." W. D. WADE.

he will be surprised to know that the latter puts in pretty much all his time from five or six o'clock in the morning until eight to ten at night; and that he is expected to be on hand and attend to business six or seven days in the week, every week in the year.

But for this man's increased expense, by living in the city, where every article of food and fuel must come through the "middle man," and pay him his usual percent of profit, the city laborer might pay by some surplus for days of adversity. We have known a farm hand to quit a good job and go to the city to labor. He gets employment at hauling ice-up at 2 o'clock a. m. and works until late in the evening at a kind of work the hardest possible on his health, and never knows a night of unbroken rest.

A polite Frenchman once offered a man to whom he had taken a fancy, a brandy, wine, cigars and snuff, each of which in turn was respectfully declined. He then proposed to introduce his new friend to his handsome daughters and when he was assured that the man had no taste for feminine beauty or company, the Frenchman said, "diabolique, monsieur, how do you ever have any fun?" Brother Heaton doesn't like bananas, papaws, oysters, or perhaps or Roquefort cheese and it was not for his books I don't see how he has any fun.

"That Seed Bag," page 6, reminds me that it is time to order seeds for the coming season. We save our own seeds of beans, peas and turnips; the rest we buy. I am inclined to think that turnip, radish and cabbage seeds are deteriorated by mixing with the various kinds of mustard, and I know that lettuce will mix with wild or prickly lettuce.

I twice failed to grow egg plant by sowing home grown seed, although the seed was taken from as fine specimens as I ever saw, yet the seeds would not germinate. We grow Early Long Purple for early and Improved New York egg plant for late. The early is the most desirable and is also the sweetest crop with wild or prickly lettuce.

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One of the most extravagant leaks is the continued "grain farming" of our lands. "Stock farming" is calculated to build up the fertility of our soils and gives us less hard toll; but none the less we are continually employed looking after the well-being of our stock and the repairs of our farms. Some so-called farmers among us argue that timothy meadows make our farms less fertile each year than does corn with a good cocklebur accompaniment. This is a theory of which I know nothing from experience. Possibly Dean Waters could give this class of farmers pointers on such theories. When I was a boy we grew some of these pecky burns, but not for commercial or fertilizing purposes. It was only until we could exterminate them from fields recently purchased. Many a day in July and August we marched through the maturing corn armed with a big, broad hoe with which to annihilate Mr. Cocklebur. Since we have farmed for ourselves we fight him with clover and timothy. This is easier and the soldier so employed pays his way and leaves a balance on the right side of the ledger, and never asks a pension afterwards.

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PRACTICAL FARM PAPER, 56.

Editor RURAL WORLD: A man came to my house last week to get my advice about setting out an orchard, but before I talked with him 10 minutes I found that I had a big job on hand.

He was modest in his "wants." He wanted to plant apple trees 25 feet apart and peach trees among them. He wanted 50 apples of 10 varieties, 25 peaches of 9 varieties and 10 sorts of plums. He had selected his varieties, and had every new one in the catalog. He was to get extra large trees and finally was to turn the orchard into a hog pasture as soon as he could get a good sow started. After he had told me all his "wants," I asked him if he really wanted my advice. He said he did, and I discussed unto him about as follows: "An old orchard site is not a fit place to start a new orchard. You should not plant apple trees closer than 25 feet apart. One of the most common, and yet very expensive leaks is the shameful waste of time. Let each reader stop and make a note of himself and his neighbors for a few minutes and calculate how many hours, yes, how many days, year, how many weeks are frittered away each season which might have been profitably employed making needed repairs on fences, barns, stock sheds, filling unsightly and damaging ditches on our farms, hanging sagging gates or doors, cleaning out stables and hauling clay or gravel and filling low, wet places in the horse barns."

The average farmer often complains of long working hours and small remuneration. If he will exchange places with men who shall attend the college.

The RURAL WORLD has a very high appreciation of his present attainments and ability to instruct, though a young man in the work, and a year spent in study and investigation should make him one of the best prepared agricultural teachers in the country.

And, by the way, will not some good people think it remarkable that a man who has graduated from one of our most prominent agricultural colleges, that is, Michigan, and engaged subsequently for a

year in the work, and a year spent in study and investigation should make him one of the best prepared agricultural teachers in the country.

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I advised him to select a new site, to get known and tested varieties, to plant one-year-old peach and two-year-old ap-

le trees and to keep all hogs out of his orchard; but I will bet a twist of my best 1899 tobacco that he will carry out the program he had settled on before he came to see me.

"The parson" is built on a different plan from this man; he is going to have two acres of fruit and flowers the first year. The parson is right about potatoes; we find Freeman, Early Ohio and Early Hebron of much better texture and flavor than late sorts.

A polite Frenchman once offered a man to whom he had taken a fancy, a brandy, wine, cigars and snuff, each of which in turn was respectfully declined. He then proposed to introduce his new friend to his handsome daughters and when he was assured that the man had no taste for feminine beauty or company, the Frenchman said, "diabolique, monsieur, how do you ever have any fun?" Brother Heaton doesn't like bananas, papaws, oysters, or perhaps or Roquefort cheese and it was not for his books I don't see how he has any fun.

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The Dairy.

IS IT BEST?

Editor RURAL WORLD: The tendency of the manufacturing of butter and cheese, like all other industries, is toward concentration, by merging small factories into one large concern, under one management; and the question that naturally arises is, is it best for the individual dairyman? The same arguments are being advanced in support of concentration in the manufacturing of dairy products that have been used by the promoters of all trusts; namely, that under one management the cost of making will be less than under the present system of small factories.

I do not intend to either affirm or deny these statements, only to call attention to the fact that this same argument has been used in favor of all trusts ever organized. It is also a fact that if the cost has been reduced the increased profits have gone into the coffers of those composing the trust, rather than into the pockets of the farmers who furnish the milk or those of the consumers of dairy products. A trust will never be of benefit to anyone but the trust. Trusts are not built that way, this we all know from experience.

Dairymen who supply milk for our large cities—notably New York and Chicago—were either persuaded or forced into turning one feature of their business over to milk trusts in those cities, and they are now reaping bitter experiences. The producers of milk were told that they would receive better prices for their milk by this new method of doing business, because expenses would be reduced, and the consumer was told he would get cheaper milk for the same reason. Instead of these promises being fulfilled, the price has been raised to the consumer and the prices for milk paid to producers have gradually been forced down until there is said to be but little if any profit to the dairyman. Instead of the profits that were to be realized by the cheapening process going to consumer and producer they simply drop into the coffers of the milk trusts of our cities.

Then is it not reasonable to assume that this will also be the history of the butter and cheese industry? If it does not, then it will be an exception to the general rule.

I believe this process of cheapening costs in manufacturing has worked great harm to our country, as a nation and individually. We were never so prosperous as when we were a people of small manufacturers.

When on every stream, where there was a possible site for water power, one found the small wheat, corn, saw, woolen, or cotton mill; when the farmer made his own butter, and marketed it, and retailed it from his own wagon; when in every town and village one found the small manufacturer, turning out complete wagons, plows, implements of all kinds, furniture, household goods, everything in fact needed by a prosperous and contented people. These were the days when the wealth of our country was in the hands of the wealth producer instead of these being facts, as I believe them to be, would it not be for dairymen to guard with jealous eye the great dairy industry, the only one left where the farmer stands close to the manufacturer in small factories, lest it also pass out of his hands and control?

That there is a move on foot to combine or form trusts is sure, and that if successful in getting a foothold this trust will squeeze out all small factories is equally sure; this is what trusts are for. It will first kill competition then skin the dairyman. There is danger in this move. Labette Co., Kan.

M. E. KING.

FROM SOUTHEAST MISSOURI.

Editor RURAL WORLD: I wrote you some time ago telling of our dairy. We are still in the business and are doing reasonably well. We have a good trade and are at present selling nearly all the milk from 45 M cows. We do not make butter to sell, as we sell the cream.

It is much less work to sell the sweet cream, and we never have any difficulty in finding customers for it. The roads have been worse this winter than has been the case since we were in the business. Sometimes they are almost impassable. I have been attending school this winter and have not had much of the care of the milk-house, only what I can do when I get home in the evening and before school in the morning. Our stock is looking well.

RENA SCHINDLER.

Ferry Co., Mo.

SMALLER TEST BUT MORE PROFIT.

Mr. W. W. H., of Alden, Iowa, writes: "Referring to the article 'Cows That Went to College,' did you in your experiment settle the oft disputed question as to whether the milk of well-fed cows is richer than the starved animals we see standing on the north side of a barbed wire fence with the wind blowing and the thermometer below zero?"

Unfortunately we do not have a test of our cows previous to their arrival at college, and we cannot therefore tell just what influence a barbed wire exerted on the composition of the milk, but we do know what they have been doing since their arrival at the college.

We have ten cows that have gone far enough on their second year's record so that we can make a comparison that corresponds with the period of lactation for two years. Of course we must bear in mind the percentage of butter fat in any cow's milk increases as the period of lactation advances. The following table gives the results of these ten cows for corresponding portions of the lactation period:

No. of the cow...	28	5	11	33	9
Test 1898.....	4.74	2.09	5.04	3.69	4.03
Test 1899.....	4.82	3.69	4.61	3.58	4.11
Difference.....	.08	.60	.43	.02	.08

Average difference, .075.

From this table it will be noticed that four cows gained in the per cent of butter fat; one cow has exactly the same per cent in both years, and five actually lost in the percentage of butter fat; the average result shows a loss of .075 of one per cent. Out of these ten cows there were four that calved about the same month in each year; two of these four gained in the percentage of butter fat and the other two lost, the average showing neither a loss nor gain. Five out of the ten cows began their lactation period from three to six months later in the second

year than the first; two out of the five gained in the percentage of butter fat and three lost.

While the average percentage of butter fat of these ten cows decreased .075 of 1 per cent, the total yield of butter fat increased over 30 per cent. From these figures it will be seen that feed had very little to do in changing the percentage of butter fat, but it did have a very marked influence upon the total yield of butter fat.

D. H. OTIS,
Kansas Experiment Station,
Manhattan, Kan.

HOW MILK IS HANDLED IN DEN-
MARK.

The Milk Supply Association of Copenhagen, Denmark, requires each farmer supplying milk to bind himself to inquire and truthfully report every case of infectious disease occurring on his premises or among persons in his employ, says "Farm, Stock and Home," the association "in return contracting to pay the highest price for such milk, although it is rejected. Every cow on farms supplying milk to the association is carefully examined fortnightly by skilled veterinary surgeons, as are also the stables, food, etc. Inspectors and experienced dairy maid also visit the farms to observe their management, cleanliness and methods of cooling the milk, regarding all of which there are strict regulations. The milk must immediately after milking be cooled to 41 degrees, and must never be allowed to stand in the sun. Food which will flavor the milk disagreeably—such as turnips—must not be used, but carrots and mangolds may be fed in small quantities mixed with large quantities of corn. Stale feeding is not allowed in summer, when cows must be fed in the open air on grass or clover.

On the arrival of the milk in Copenhagen it is once sampled by experts, its temperature noted, placed in cans surrounded by ice, and the next morning run out into filtration tanks, which have three layers of gravel separated by perforated trays, the upper layer being covered with six thicknesses of fine cloth the whole being kept in position by a pyramidal framework, which passes down the tin trays. As the milk rises to the tops of the tanks it passes into a large storage receptacle, and thence to the bottling room, where it is bottled or canned, labeled, tied up with a thread, sealed with a leaden stamp seal, and then taken to the carts being so constructed as to prevent tampering with the cans, and the milkman being in uniform. The cans are sealed, steamed, and sterilized daily, and the filter boiled in hot water and steamed daily.

RAISING CALVES BY HAND.

First, let the calf suck the cow once or twice and notice carefully the appearance of the sides of the calf afterwards—see how much they stick out, writes E. J. W. Dietz in "The Corn Belt." Then remove the calf to a warm pen and let it go twenty-four hours without anything to eat or drink. Of course the dam will be milked regularly. When the calf has fasted for twenty-four hours it will be very hungry. It should then be fed some of its dam's milk while it is still warm and fresh from the udder. She should have a longudder from front to rear. Then she must have a good handle on each corner of her udder. And why? Because if she gives two pails of milk a day it is a matter of some labor to milk her.

In last week's issue we presented a picture of Bessie Lewis 0657, owned by M. Hilligert, of St. Joseph, Mo., and on this page we present the picture of another of Mr. Hilligert's Jerseys, Ida's Bessie 0656. We take pride in thus calling attention to some of the splendid Jerseys owned in Missouri. They are what will, more than anything else, make Missouri a dairy state.

POULTRY POINTERS.

F. D. LUCE, Shelburne, Mo., can supply eggs for hatching from S. C. B. Leghorns, B. P. Rocks and Black Langshans, at prices so reasonable that any farmer needing to improve the flocks can afford to buy them. See the advertisement and write Mr. Luce. He will treat all customers just right.

HAVE CALVES COME IN THE FALL.

Prof. Haeger of Minnesota offers the following reasons for having fall calves. He says: "In the first place the cow will give a larger yield of milk for twelve months, if she comes in the fall than if she comes in the spring; in the second place, it will cost less to rear the calf during the first six months if it is in winter time than it will in summer time; in the third place, we must feed a calf any way from four to six months, and we might as well do that during the winter; then the spring it is let out to pasture and you have no more trouble with it. Therefore, when your calf is a year old, you have given it personal attention for from four to five months, the balance of time it has taken care of itself."

DAIRY NOTES.

Do not feed the dairy calf on fat-forming materials. A cow that is heated or worried will not give her milk freely. The utilization of all the side issues of the dairy will help to make the work.

Butter, to keep well, must have nearly or quite all the buttermilk washed or worked out of it.

All milk for calves must be pasteurized, if everything goes well the quantity of skin milk may be increased daily and the dam's milk diminished until at twenty days old the calf is drinking only skin milk with ground feed in it.

It is not necessary to make a jelly of the ground fat, but feed it raw, remembering it is about 40 per cent oil, so a teaspoonful would be equal to nearly one-half teaspoonful of butter.

In feeding skin milk care must be taken to have it perfectly sweet and warmed for the calf before feeding. Some calves after they are a month old may thrive on sour skin milk; but it is risky to try it. If, however, the calf gets sour milk do not change, but continue to feed either one or the other.

After the calf is accustomed to skin milk and ground fat they can be increased in quantity from time to time.

If you want to make a milk cow of the heifer do not add any corn meal, oat meal or cotton seed meal and fed only twice a day.

NOME CITY, ALASKA.

It is twenty-eight hundred miles from Seattle, via ocean. It is said to be the richest gold field discovered up to this time. The first steamer will leave Seattle on or about May 10, 1900. For full particulars, maps, etc., address Geo. H. Heaford, General Passenger Agent, Chicago, Milwaukee & St. Paul Railway, Chicago, Ill.

After a month or six weeks old the calf should be allowed to nibble at some clean timothy hay and it will be found sometimes the calf will take more readily to this if it is above its head in a rack. Also some oats in a box will be found good for it; and it should have a chance to help itself with salt and water.

Average difference, .075.

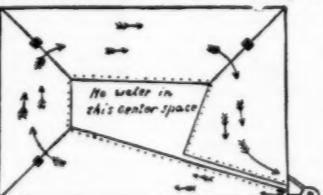
From this table it will be noticed that four cows gained in the per cent of butter fat; one cow has exactly the same per cent in both years, and five actually lost in the percentage of butter fat; the average result shows a loss of .075 of one per cent. Out of these ten cows there were four that calved about the same month in each year; two of these four gained in the percentage of butter fat and the other two lost, the average showing neither a loss nor gain. Five out of the ten cows began their lactation period from three to six months later in the second



IDA'S BESSIE 0656. Sire Ophie's Exile 0655, dam Ruth's Bessie 0649 (daughter of Bessie Lewis). Ida's Bessie milked 22 lbs. at one milking as a three-year-old. Owned by M. Hilligert, St. Joseph, Mo.

THE SURE HATCH HOT WATER TANK.

During the cold spring of 1899 it occurred to the inventor of the Sure Hatch incubator that a tank with its greatest heat around the outer edges instead of through its center, would be a great improvement over anything now used in incubators. No sooner thought than put to practice. As will be seen from the above the tank is made of but one piece of material. The metal is cut to shape and then turned up over a form. The turned up sides are pressed over and riveted to the main body; after being riveted it is thoroughly soldered. The mitered corners are locked and soldered. No seems to the bottoms or sides of these tanks. The hot water from the boiler makes a complete circuit of the tank. The hot water space



gets wider as the water gets cooler. The water in the center of the tank that contains no water is filled with mineral wool, thus the center of the tank is warmed also. This is the only tank manufactured that utilizes the heat thrown off from top of the tank. Instead of overheating the center of egg chamber to get the outer edges warm enough our tanks warm the outer edges and walls of the egg chamber, if the outer edges are warm enough, the center will be warm enough. This is one of the many practical features which make the Sure Hatch Incubator deserve its name. Write for catalog and learn all about it. Please mention this paper in writing. Address Sure Hatch Incubator Co., Grays Center, Neb.

JOHN GOULD'S IDEAL COW.

John Gould of Ohio described his ideal cow as follows:

"She is not large; she weighs about a thousand pounds; she is something like a race horse, for speed in the horse and milk in the cow are allied. Beef in a horse and beef in a cow means strength always. It is a question of nerve power, and that is something that food will not produce, only maintain. For the typical dairy cow you must have race horse type, bony and muscular, whether she be a Holstein, a Jersey, or whatever she may be. You will find her with a bony head and strong jaw, broad between the eyes and nose, with a broad muzzle. She should also have a bright, protruding eye. Why? Simply on account of her brain power. It means strong nerve force, and that means action. I want a thin neck and retreating brisket. The lines above and below must not be straight, or she will steal from you; I want her slightly depressed behind the shoulder, with sharp chin; I don't want to straight a backbone. She must have large organs of reproduction—you don't want a cow with a straight back; I want her wedge-shaped. I want two wedges, large in rear and large heart girth, i. e., wide between forward legs, sharp on shoulder. This gives large heart action and the strong arterial circulation that I want. Then, last, but by no means least, she must have a good udder, for one-half of the value of the cow is in her udder. She should have a long udder from front to rear. Then she must have a good handle on each corner of her udder. And why? Because if she gives two pails of milk a day it is a matter of some labor to milk her."

In last week's issue we presented a picture of Bessie Lewis 0657, owned by M. Hilligert, of St. Joseph, Mo., and on this page we present the picture of another of Mr. Hilligert's Jerseys, Ida's Bessie 0656. We take pride in thus calling attention to some of the splendid Jerseys owned in Missouri. They are what will, more than anything else, make Missouri a dairy state.

POULTRY POINTERS.

F. D. LUCE, Shelburne, Mo., can supply eggs for hatching from S. C. B. Leghorns, B. P. Rocks and Black Langshans, at prices so reasonable that any farmer needing to improve the flocks can afford to buy them. See the advertisement and write Mr. Luce. He will treat all customers just right.

MRS. BELLE BALDWIN, Shelbyville, Mo., has choice yards of White Holland turkeys, Black Langshans and White Leghorns. Eggs from these yards will be put up in nice shape and shipped to RURAL WORLD readers at reasonable prices. Read the advertisement and write her.

M. BENWAY, Brookfield, Mo., sends change of copy for his advertisement. He writes: "Am breeding Light Brahmans exclusively, which are now mated for very best results, regardless of cost. Also Imperial Pekin ducks, W. H. turkeys and White China geese. Thanks to the RURAL WORLD for my success. The replies to my ad. were beyond all expectations. All I have for sale now is 6 young toms. All I have for sale now are 6 young toms. 6 cockerels and 4 drakes."

MRS. KATE GRIFFITH, Bowling Green, Mo., writes: "Have had good sales through the RURAL WORLD. My fowls are looking fine and are laying well. I can supply my customers with eggs from fine matings of stock. I have three fine Bronze gobblers left out of a flock of 50, which I offer for sale at \$2.50. Formerly sold them for \$3 and \$4. Also have three Brown Leghorn males for sale at \$1 each. Always put extra number of chicken eggs in every order for eggs."

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It is much less work to sell the sweet cream, and we never have any difficulty in finding customers for it. The roads have been worse this winter than has been the case since we were in the business. Sometimes they are almost impassable. I have been attending school this winter and have not had much of the care of the milk-house, only what I can do when I get home in the evening and before school in the morning. Our stock is looking well.

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Horticulture.

HORTICULTURAL TALKS.

Fires.—Land in fruit trees should not be permitted to get grassy, yet it does sometimes occur. Immense losses have been sustained by burning such places. I wish to call attention to the defences necessary to have ready when going to burn off trash. One should have a watering can full of water with the rose on, a gunny sack doubled up and tied to a strong stick about five feet long. Have this wet, and when a fire is over-reach its limits this is a capital thing with which to whip out the fire. Sometimes I go along the border and sprinkle with the can. Years ago the carelessness of a hired man came near costing me a heavy sum, as a neighbor's barn was greatly endangered, which, if consumed, I would have considered my duty to make good. Another instance was here when a stupid fellow came nearly causing the burning of a 300-dollar building, not on my ground. With severe fighting by a neighbor and myself it was saved from destruction. Prevention first, next presence of mind and the proper appliances with heroic energy; these will will.

WM. HOWARD PHELPS.
Kay Co., Ok. Ter.

FROM THE ANTHROPOS (7).

Editor RURAL WORLD: What is the matter with the states east of the Rockies that they report severe winter weather in March, with snow drifts, storms of hail and ice in this month, which used to be, "in full swing" the spring month of the year in dear old Missouri when I was a boy? I can hardly believe it, that severe frosts should extend even into the so-called South, and threaten vegetation with destruction, when I look upon the sea of blossoms on the fruit trees here, on grass more than a foot high, on roses, geraniums, violets and heliotropes, wintered without protection in the open air, and are now in full bloom. Have we really become the antipodes of the Eastern States? We have just passed through one of the mildest winters, not only in my estimation, but even in that of the "oldest inhabitant," California has ever seen. Our stock has hardly needed any feed since end of November, and are sleek and fat enough for the butcher; and the abundance of rain here in Northern California promises abundant crops of all kinds, which we have had even the last two dry years, as they were called, without artificial irrigation. It is a blessing we always enjoy and for which we can hardly be thankful enough. As a comparison with this and our southern counties, I state the rainfall, at San Diego, a little over three inches; Los Angeles, nearly five inches; Fresno, seven inches, and Napa, over twenty inches. This will show conclusively that we need no artificial irrigation, while those counties cannot exist without it. And yet immigration will flock to the southern counties, pay four times the price for land at which it would be obtained here, with the same, if not better, market facilities, and nearer to the metropolis, San Francisco.

One day last week I sent off in one mail a packet for Southern California, one to North Carolina and one to Eastern Pennsylvania. The putting up of a packet for the mail bag is a nice little job, and in my exchanges, I only acknowledge one my superior; that was the late Geo. W. Campbell, of Delaware, Ohio. The main thing is to have the roots well packed in moss, damp, covered with oiled paper to keep the moisture in. Then tie up carefully, with address put on plainly, and one in a hundred will go astray.

No, I have not got the raspberry-strawberry, but I got from a friend what is to be the strawberry tree. It looks like a wild trumpet creeper. I have so often been disappointed in these new things that I am getting more cautious. Burning Strawberry Beds Over.—March 22, I raked around my big bed—a half acre—and started the fire on the side opposite to where the wind came from. As my plants were not mulched last fall on this bed, the fire was to burn all the dry leaves and pine grass. But it did not burn well, so the hoe will have to be used. All surplus plants are to be hoed out and the ground hoed between the rows; then covered with straw to keep the fruit clean. Biennials often get a foot or two in the ground in the fall, and if not cut out will make a bold appearance in the fruiting season is over. They look badly, besides take moisture out of the ground that the strawberry plants need. The bed adjoined to above yielded a good crop last season and promises fair again, although not covered. Of course all the plants set out in September and October were carefully covered and look well. A number of new ones will fruit for the first time here this summer and we may be able to laud some and condemn others. We should always say if we live until such a time. An attack of a gripe has made me almost worthless for nearly a week and the end is not yet.

Bluffton, Mo. SAMUEL MILLER.

FRUIT TREES ON THE ROAD SIDE.

Editor RURAL WORLD: It was with great interest that I read the article upon fruit trees by the road side in foreign countries, which appeared in a late issue of your paper. The adoption of such a method in our country would certainly go a long ways towards solving the road question. The revenue derived from four miles of trees around each section would be no mean item to expend upon the roads of that section. It would mean the revenue from two rows of trees, each a mile long, to every mile of road. In each row, at 40 feet apart, there would be 133 trees or 266 trees for every mile. In one road across the township, six miles, there would be 1,300 trees, which, in good bearing, ought to give a return of one dollar per tree, or \$1,300 to spend upon the roads of that township; just that much more is now spent, or just so much clear gain. An expenditure of \$20,000 per year for ten years would place at least four steel road, double track, across the township, a road that would enable the team to draw four or five wagons easier than it can now draw one and save to the farmers each year as much as the cost of the roads in addition. This would place iron roads within one and a half miles of every farm and would certainly enhance the value of the farm two fold.

This work in prairie countries could be accomplished at very little expense. On our farm I have been plowing to the center of the road and in two years' time I expect to have the best road and prettiest "road side" in the county. I throw the dirt to the center of the road and to the fence, thus making the dead turn or gutter just a rod from the center of the road. When I have obtained a good road and gutter I will seed to alfalfa. I would of course like blue grass, but alfalfa is surer and the hay will pay well for the mowing and keep down every weed.

The laws of Oklahoma permit one to cultivate a row of trees ten feet from the fence. This would place them six feet from the gutter. As soon as the ground is seeded to alfalfa I will dig holes fifteen feet apart, in the row, in which I intend to plant the best variety of pecan I can obtain. I will keep enough mulching around each tree to keep the ground moist and soft.

BURPEE'S
"Seeds that Grow"
If you want to get the best seeds for your garden this year, you should send your address on a postal card for Burpee's Farm Annual for 1900. It is a bright new book, considered by intelligent planters everywhere, "the Leading American Seed Catalogue." You had better write to-day. Simply address BURPEE, Philadelphia.

Next to the fence will be high ground for pedestrians and as good a place for bicycle paths as could well be had. That is the way I am treating my roadside and some of my neighbors begin to see in it something beside madness.

If the township should take up the work and claim the profit I would gladly yield it all aid in my power, for in a few short years we would have a township that would be nothing short of a beautiful park, intersected with splendid drives.

In the twelve roads to each township are 56 acres. These acres ought to yield something besides weeds and ruts. They can be molded into splendid roadways and yield a good living to at least two families to each township at the same time. The average county has twenty townships, or 11,520 acres of roadways.

The road system of the United States is a disgrace, unsuited to our needs and far behind our other attainments. The laws are greatly endangered, which, if consumed, I would have considered my duty to make good. Another instance was here when a stupid fellow came nearly causing the burning of a 300-dollar building, not on my ground. With severe fighting by a neighbor and myself it was saved from destruction. Prevention first, next presence of mind and the proper appliances with heroic energy; these will

usually win.

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we are close enough to it to satisfy any reasonable being who is willing to work for a living. Our new possessions, whatever we may think of the policy in connection therewith, have given a great impetus to business, and San Francisco is bound to be the metropolis of the West, as New York is of the East. But I must end this rather desultory letter. With kindest wishes for the RURAL WORLD and its editors, I remain their old friend, GEORGE HUSMANN. Napa, Cal., March 22.

SWEET PEAS.

Editor RURAL WORLD: There is no flowering annual that gives more general satisfaction, and deserves to be as popular as the sweet pea. Strange to say, while I have always found it of the easiest culture, there are many reports of failure by others.

There is, perhaps, more written about sweet peas of late than any other flower,

which may be attributed to the fact that it is so desirable, and that many do not grow them successfully. Nearly every writer has a method of his own which is supposed to be better than all others; and, thus there is a natural confusion in the minds of many who would like to grow these fragrant beauties.

Some recommend planting in the fall, some plant in mid-winter; others say, plant as early in the spring as possible. Some plant in a ditch, some on the surface, etc. As an experiment, I have tried all of the above methods, but shall use none of them in the future, as I have had best success with the following, even though it is contrary to the almost universal advice to plant sweet peas when they are to bloom: I start seed in boxes, indoors in March, and when the plants are three or four inches high, plant outside, putting plants six inches apart. Thorough cultivation until blooming begins is given, and then a good mulch. In this way I get the earliest blossoms and also have them later than by any other method.

There is nothing easier to transplant than sweet peas. If carefully handled not one per cent will fail. I always buy named varieties, representing the best colors, and when putting out the plants, I mix proportionately in a way that I think will give the best effect.

Most persons make a mistake by sowing too thickly, so that the plants are all weeds to each other; just like strawberries in a thickly matted row, or corn sown broadcast. Stanley, dark red; Mars, light red; Blanche Ferry, white; and Mrs. Jos. Chamberlain, striped, are among the best varieties.

EDWIN H. RIEHL.
Alton, Ill.

MUSHROOM CULTURE.

Editor RURAL WORLD: Complying with your request, I reply to an inquiry from Mrs. MacDevlin, Jackson Co., Mo., regarding the culture of mushrooms, as follows:

Mushrooms can be grown in any cellar, stable or shed where the temperature of 50 degrees can be kept up during the winter. Plantings are generally made during the fall and winter, but there is a demand for the spawn through all the spring months. It is very necessary to take the precaution of placing the bed where no water may drip through to it.

First, take fresh horse manure and let stand in a heap for about one week in some dry place. Then carefully turn it over several times at intervals, being careful at each turning to thoroughly incorporate the outside with the middle of the pile, to insure sweetness and even moisture. After this, intermix an equal amount, or less, of light loamy soil taken from a pasture field or from along the yard fence. Make this composition into a bed of the desired size eight inches in depth, and pound down with a spade, leaving the surface even.

After the bed reaches a temperature of about 50 degrees, set into it small pieces of the spawn two inches deep and seven inches apart. A week hence cover the entire bed with good soil to a thickness of two inches. Water sparingly with lukewarm water, but only when the bed is dry.

"A 'brick' of spawn weighs one pound and is sufficient to plant ten square feet. Imported English spawn can be secured from Plant Seed Company, St. Louis, who sell the bricks at 30¢ each, postpaid, and upon request send free their circular, "Mushroom Culture," which gives full directions for growing. F. W. MAAS.

SOUTHEAST MO. FRUIT NOTES.

Editor RURAL WORLD: My recent report on the fruit prospects needs some correction, for if it were possible I should believe that dead buds have been resurrected. Soon after the hardest freeze of the winter I examined my trees and there appeared to be only here and there a bud left, but since the warm weather began to swell the buds I am agreeably surprised to find that there is quite a showing of all fruit buds left. Here is a summary of the present prospects for all kinds of fruit represented on my place:

Peaches.—A full crop of Heath Cling. Other kinds (except seedlings) from one-half to three-fourths of a crop. I have one variety named "Walker's Seedling," which originated in this county, near Hillsboro, but has never been introduced anywhere else to my knowledge.

It has enough buds left for two or three crops, which proves it to be the hardiest peach in this locality. It is a medium-sized yellow freestone, and has been pronounced by all who have sampled it to be the best flavored peach they ever tasted.

If I can save any good specimens from the ravages of the insects, will send you a few samples. Some of the peach trees were damaged on the trunk and around the crotch by the freeze of a year ago.

Apples.—Trees were more or less damaged by the freeze just mentioned and the state is bound to be the most prosperous in the Union, when all its natural resources are fully developed. But we need industrious immigrants to assist in doing so, to divide up the large land holdings into small homes, with diversified farming. There are splendid chances here for families who can make a comfortable living on ten to twenty acres, by raising some poultry, with a few acres of pasture and grain to keep a span of horses and a few cows, and a succession of fruit, to have a steady income all the year round, in the healthiest climate in the world. It is not excessively hot in mid-summer, with cool nights to rest in, so one awakes refreshed in the morning; not a winter's day cold enough to freeze the ground too deep for plowing, so that sowing of grain and planting of trees and vines can go on all winter. This is not idle talk, but facts, which can be fully substantiated. I do not pretend to say that we are in Paradise, but I think

especially. With a good season from now on there will undoubtedly be a large crop.

Plums.—Trees are in good condition, and there is an ample number of live buds left for a full crop of fruit.

Berries made rather poor growth last summer because of the freeze of the winter previous, and also the preceding dry weather. For what vines there are will be full of fruit unless late frosts do further damage.

Referring to the strawberry-raspberry mentioned by Judge Miller in "Horticultural Notes," March 21 issue, I have tried the plant and found it wanting in everything claimed for it except that it is a distinct novelty. It is very sour, about the size of ordinary wild strawberries, and is liable to "blast." Jefferson Co., G. BUCHER.

SWEET POTATO CULTURE.

Editor RURAL WORLD: The fact that so little space in the agricultural press is given to this product and profitable a vegetable as the sweet potato (which is the potato) is the apology for this brief article from one who has grown it for market many years in a section perhaps more remote than the Eastern States.

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Jefferson Co., G. BUCHER.

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53 EARS 1 BUSHEL. Omaha and World's Prize Corn. \$1.00 per bushel. Send 5 bushels; half bushel \$1.00, one pound \$0.25. H. W. HOWARD, Cobden, Ill.

SEED Oats. Write for C. MUNZ, Fairbury, Illinois.

VICK'S Vigorous Seeds make planting profit. Able. JAS. VICK'S SON, Rochester, N.Y.

REDUCED PRICES ON PEACH TREES! 4 to 5 ft., 2 lbs.; 3 to 4 ft., 1 1/2 lbs.; 2 to 3 ft., 1 lb.; 1 to 2 ft., 3/4 lb.; all 1 year, bud. Sample by express. Trees post-dormant till May 15th. Send for circular. R. S. JOHNSTON, Box 19, Stockley, Del.

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COMING SALES.

April 11-12.—D. L. Dawdy & Co., Atchison, Kan. Shorthorns. Sale at Kansas City, Mo.

April 12.—W. R. Slaughter, Salisbury, Ma. Herefords.

April 17-18.—F. A. Nave, Attica, Ind. Herefords. Sale at Chicago.

April 18.—J. C. Ponting & Son, Hartwick, Iowa. Shorthorns.

April 18.—Tom C. Ponting & Sons, Monequa, Ill. Herefords.

April 25-26.—Armour, Funkhouser, Sparks and Logan, Kansas City, Mo. Herefords.

May 10-11-12.—W. R. Brasfield & Co., Kansas City, Mo. High class trotters, roadsters, saddle horses, pairs and general purpose horses.

Nov. 22 and 23.—Logan Chappell, Mt. Leonard, Mo. Walter Waddell and Thos. Sawyer Lexington, Mo. C. B. Smith and N. W. Leonard, Farmington, Mo. Herefords. Sale at Kansas City, Mo.

Our illustration gives our readers a chance to see a typical Galloway cow of one of the noted strains of this popular breed of Polled cattle. Among the consignment of 50 head of Galloway cattle to be sold at public auction at Kansas City, Mo., April 20, there will be several of the descendants of this great cow, as well as representatives of many other popular and high-priced families. With unlimited means at command the Brookside Farm Co. has bought the best from the start regardless of cost and to-day the herd is considered the best in the United States and equal in breeding to any herd across the water. The entire 50 head in the sale were bred at "Brookside Farm" and represent the cream of this great herd, and all tracing directly to imported sires and dams. We ask our readers to attend the sale and aid in making it a success.

STOCK NOTES.

RED-POLLED CATTLE.—Those wanting registered Red-Polled cattle are referred to the advertisement of H. W. Kerr of Carlinville, Ill. The Red-Polled have many friends, and Mr. Kerr will treat customers so that they will buy again from him when they need more stock.

MESSRS. D. B. OREAR & CO., Kansas City, Mo., write as follows: "In offering the Perfect Dehorning Crayon, we have taken another step forward in the interest of cattle raisers, throughout the land. The day of long horned cattle is past and we offer a Dehorning Crayon that has by several years of actual test proved to be all that we claim for it. Any one dealing with us is assured of prompt and honorable attention and satisfaction is guaranteed."

N. G. DAUGHER & SON, Douglas, Knox Co., Ill., make a change in their advertisement naming the price on some choice Aberdeen-Angus bulls they have for sale that are individually very good, and stired by "Royal Eric of Cedar Lake 2639" by old Royal Eric 12324, and out of Baroness of Beaconsfield 2d 2625, she by Black Abbott 10423. This makes the breeding gilt-edge, and at the prices named these bulls are certainly very cheap at the prices indicated. Write Daughmer & Son and please mention the RURAL WORLD.

LAST CALL FOR THE W. R. SLAUGHTER SALE OF HEREFORDS.—RURAL WORLD readers are again reminded of the dispersion sale of the entire herd of Hereford cattle to be closed out at Kansas City, Mo., on Friday, April 13. This will afford an unusually favorable opportunity to secure bulls, cows or heifers of excellent breeding and individual merit at prices that any one can well afford to pay. The fact is Mr. Slaughter is not respecting high prices, such as have been realized at late sales at Kansas City, we again urge any of our readers needing good Herefords of any age or either sex to attend the sale. Remember the date—April 13.

THE GOODRICH GALLOWAYS.—On Thursday, April 19, J. S. Goodrich, at public sale 31 head of recorded Galloway cattle. Included in the offering will be 18 bulls and 13 young cows and heifers, all of Mr. Goodrich's breeding and which have been handled as Mr. Goodrich thinks Galloways should be handled. The bulls offered are an especially fine lot and include a number that are fit to head herds. Any one wishing to start a herd of this admirable breed of rustling cattle, or wants to add new blood to his herd, will do well to attend this sale, in the meantime sending for a copy of the catalog to Mr. Goodrich or to Frank B. Hearne, secretary Galloway Cattle Breeders' Association, Independence, Mo. Goodrich is 6 miles south of Kansas City, on the M. K. & T. R. R., and 22 miles from Palos, Ill.

J. H. A. BARBER, the Shorthorn breeder at Windsor, Mo., writes to the RURAL WORLD: "I never had such a demand for bulls and heifers as at present. I have sold to the Riverside Stock Farm, St. Charles, Mo., a massive young Crickshank bull 11 months old that weighed a little over 900 pounds. I also sold the same party (V. D. Dehler) a sixteen-month-old Red Butterly heifer, bred to my herd bull, Orange Duke 3d. I also report the sale of a Scotch top bull to A. W. Palson of Fristoe, Mo. He is said to be the best bull and brought the longest price of any calf that ever crossed the Osage River."

HOMESTEAD HEREFORDS ABROAD.—The following letter explains itself and is one of the many illustrations as to the money-making qualities of the breeding cattle sent out from Homestead Herd. Our readers should keep in mind the sale of Messrs. Ponting & Son at their new sale pavilion, Monequa, Ill., April 19, when there will be an opportunity to secure some of the best that has ever been offered by these reliable breeders:

State of Ohio, City of Toledo, Lucas County.—Frank J. Cheney makes oath that he is the senior partner of the firm of F. J. Cheney & Co., doing business in the City of Toledo, County and State aforesaid, and that he has paid the sum of **ONE HUNDRED DOLLARS** for each and every case of Catarrh that cannot be cured by the use of Hall's Catarrh Cure. **FRANK J. CHENEY.**

Swear to before me and subscribed in my presence, this 6th day of December, A. D. 1886. **A. W. GLEASON**, Notary Public.

Hall's Catarrh is taken internally and acts directly on the blood and mucous surfaces of the system. Send for testimonial.

DR. CHENEY & CO., Toledo, O.

Hall's Family Pills are the best.



Tom C. Ponting & Sons, Monequa, Ill.

Gentlemen: Yours at hand and glad to hear from you. Will attend your sale if I possibly can. About the cow, April 20, I bred her when she was one year old and she has since been able to bring out every year, and has never brought but one bull calf. His name was Ked 2d 2324. He was a first prize winner and a member of the Brookside Farm blood line. His daughters and granddaughters were prize winners, and they are all extra good milkers, as is the old cow. Miss Henrietta 2d, one of her daughters, won many awards and other prizes. Her first calf, a bull, was a first prize at the Dallas Fair, showed as a calf first in class and won any age Texas breed. He showed against aged bulls at Dallas Fair, and was a first prize at the fair for \$50. Miss Henrietta 2d 23081, her second calf, was a bull, and was a year old, F. W. Fat Stock Show, 1888, and won \$100. Her fourth calf took first as best yearling bull F. W. Fat Stock Show, 1888, sold at nine months old to Mr. Hobson, with cattle from the Dallas Fair, and second best bull any age, Dallas Fair, 1888. Had an offer of \$3,000 for him by Mr. Robert J. Kieberg, of Corpus Christi, Tex. The old cow's other daughters and granddaughters have all come out and are a source of money. The old cow will bring a calf this spring by the Champion Warrior 2017. So you see there is a valuable property here. Will you give me a chance to show her? Yours very truly, W. S. IKARD.

FAIRVIEW HEREFORDS AT AUCTION.—In our last issue we promised something relating to the females in the grand dispersion sale of "Fairview Herefords" at Chicago April 17-18. Nothing more than a brief mention can be made of some of the special attractions, but we wish to impress upon the reader not to rely entirely upon any written description of this great offering, and not to fail to make all arrangements to be present and see and secure some of the many plums that will go to the highest bidder. Among the females is the champion cow "Dolly 2d" 1988, that was champion at the Great Hereford Show at Kansas City, 1890. This is one of the most remarkable show cows that was ever brought out in the American show yard. She has gone through two great show seasons undefeated, a record that is beyond comparison. Carnation 7704, the junior sweepstakes female at the great Kansas City Hereford Show, has also been very successful the past two seasons in the show ring, and bulls fair to be the winning two-year-old of 1900. The next is the imported heifer, Lady Help, out of the same dam as Lalla Rookh, that he paid Mr. Armour \$1,000 for. Her sire is the great imported bull Diplomat that heads the famous Shadeland herd. Lady Help was imported as a mate for Carnation, and there is not a better pair of heifers in America to-day for their age. Next comes "Theresa" 9286, first prize heifer calf in the strongest ring of the great Kansas City Show. One of the best judges of the Kansas City Show said that she was the best Hereford in the show. Such an opportunity to secure prize winners of world-wide reputation rarely occurs, and every breeder and lover of Hereford cattle should by all means attend this great sale. Mr. Nave does not expect sensational prices, and it is very likely there will be bargains for those who are on the alert to pick them up. A very fine leather-bound Herd Record, nicely arranged and printed on the best paper, will be presented to every purchaser. It is indeed a valuable souvenir. Remember the date and let no common excuse keep you from attending.

Veterinary.

Answers to questions in this department are given by Dr. T. E. White, former State Veterinarian for Missouri, Sedalia, Mo. Write questions on one side of paper only, and separate from other business.

BONE SPAVIN.—Give a good remedy for bone spavin?

RED KIESOW.

The only sure way of curing a horse with a bone spavin or a ring bone is to have an expert veterinary surgeon fire the bony tumor. In about two months after the operation he ought to go just as sound as he ever did, if it were rightly done.

ACTINOMYCOSIS.—I have a bull that has a lump on the side of his neck. Some call it lamp jaw. Will it do to breed to this bull? How can the lump be removed? Will his calves inherit the lumps?

Johnson Co., Mo. **J. C. CRAIG.**

It is possible your bull has what is commonly called big-jaw by cattle men

because as a rule these tumors appear on one or other of the jaws. The germ is in the tumor, consequently to scatter the germ, the lump must first break and discharge its contents on the grass or hay, the germ actinomycetes is a vegetable germ and will live, grow and thrive on grass and hay just as well as in the tissues of an animal. Cattle become infected from infected grass; and an animal discharging the germs on the grass, hay, etc., will in this way infect other cattle running on the same grounds. Dogs and birds are very liable to carry the infection from field to field. Cut out the tumor with a knife. Treat the wound the same as you would a barb-wire cut on a horse. As the disease is not hereditary, it is not apt to affect the progeny.

SICK CATTLE.—I have lost five young cows and one young calf; cows all had young calves. They all came up well and strayed as though it were a kidney affection. They then began to lick themselves mostly on their thighs. The hair came off some where they licked themselves. After they began to lick and bite at their hind quarters they were not still at all. They continued licking as long as they could stand up. They live from 12 to 24 hours. They ate heartily until sick. They have been fed cotton seed hulls, corn hay and some chops, mostly hulls.

Ponsett Co., Ark. **J. B. GANT.**

As cotton seed contains more nitrogen than any other one food used, it is not best to feed liberally with it. When an animal is unable to eliminate this nitrogenated material from its system through the pores of the skin and lungs, it dies.

(This is exemplified in the horse when at-

tailed with azoturia.) A nitrogenated animal's urine should be colored (in your letter you failed to say anything about the urine), commonly designated bloody urine. Would advise that you discontinue feeding the cotton seed hulls and allow only very little exercise, for the quieter the cattle are kept the better it is for them. On the first symptom presenting itself give each adult animal a drench of two pounds of epsom salts, half an ounce of powdered Jamaica ginger and one ounce of potassium chloride; dissolve in three pints of milk warm water. The above is one dose.

ADHERING PLACENTA.—My brooders have a number of Red Pole and Hereford cows to bring calves. The three that have brought calves failed to clean themselves. I introduced my hand in an effort to clean the first one. It seemed to me that her calf bed was covered all over with nodules or lumps of matter fastened to the womb with a tough membrane. These nodules varied in size from a hen's egg to that of a goose's egg and were oblong in shape. I peeled some of them out. They were porous like a sponge and look like lobes of the placenta. The one I once tried to clean, I found her calf bed in the same condition. I had concluded after trying to clean the first one that these nodules were lobes of the placenta and should be removed. So on the second one I made a good deal of traction on some of the lumps and by some assistance from the cow, I succeeded in pulling the calf bed out. I found it covered with these nodules. They were covered with a membrane which could be easily removed. When the membrane was taken off they look dark and were porous like a sponge.

The same condition existed in the third one. I would be glad to have Dr. White's opinion as to what these nodules are and what was the cause. Also please give us an article on the proper method of removing the placenta when the uterus fails to expel it. **J. S. CANTRELL.**

The answer to J. S. CANTRELL, "Adhering Placenta," which appeared in the RURAL WORLD issue of March 8, 1890, answers J. S. CANTRELL's inquiry.

ST. LOUIS NATIONAL STOCK YARDS.

Market Report Furnished by Evans-Sunder-Buel Company.

Friday, March 30—CATTLE—Re-epitope moderate during the week, showing increase of about 1,200 head, accounted for in the southern division. Quality of beef cattle common to fair, no strictly choice on sale. Best full load of steers this week sold Tuesday at \$5.15 per cwt., averaged 1,422 lbs., a plain, fat drove of cattle. Prices ruled strong each day, and now figure 15 to 20% higher than close of last week. Chicago receipts show increase of about 4,000 head, and the four principal markets an increase of 8,600 head, compared with last week, and 13,200 head compared with a year ago. Good strong demand for all grades of beef cattle. In our opinion bulk of fed Texas have come to market, and we will be able to sustain the advance quoted in this and our last week's letter on medium grades, which have had to compete with them. The English market shows 50c to \$1 per cwt. advance, which will encourage exporters, and should receipts not be too heavy, we are satisfied we will see a further advance.

TAURUS.—Saturday, moderate run, prices strong. Steers and feeders very scarce in strong demand. Run in the Texas division about 50 cars, quality averaging fully as good as Monday, and prices about the same.

HOGS.—Saturday, moderate run and advices unfavorable, market weak to \$0. lower, bulk selling at \$5.25 to \$5.35; Monday, liberal run and advices discouraging to \$5.40 per cwt.; best hams, \$7 to \$7.25 per cwt.; best sheep, \$5.75 to \$6; best hams, \$5.75 to \$5.25; best clipped lambs, \$5.75 to \$6; best clipped sheep and yearlings, \$5 to \$5.40.

LATE SUMMARY.

Monday, April 2.—CATTLE—Receipts in both divisions, quality of cattle very poor, bulk selling at \$5.25 to \$5.35; Monday, 2d was the best market since 1886, being 5 to 15% higher than Wednesday, bulk of good selling at \$5.15 to \$5.35, with top of \$5.50. Friday was barely steady; bulk of good selling about same at Thursday's close. We quote: Butchers and packers, \$5 to \$5.50; common, \$2.25 to \$2.50; heavy pigs, \$4.75 to \$5.10; light pigs, \$4 to \$4.35; rough hams, \$4.50 to \$5.

SHIPEE.—Market to-day is a repetition of high prices which have prevailed for the past month. Arrivals are insufficient to supply the demand. All fat stuff sold readily at following prices: Spring lambs, 8 to 10c per pound; best lambs, \$7 to \$7.25 per cwt.; best sheep, \$5.75 to \$6; best hams, \$5.75 to \$5.25; best clipped lambs, \$5.75 to \$6; best clipped sheep and yearlings, \$5 to \$5.40.

PEACEFUL MARKET.—

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Horseman.



Readers should not overlook the great auction sale to take place at Buneton, Mo., April 11, where will be sold 32 head of 2-year-old mules, 10 head of 3-year-old mules, 15 head of 4-year-old mules and 15 head of aged mules. There will also be sold at the same sale 55 head of 3-year-old steers. The sale will take place on the farm of the late Thos. J. Wallace. Read the advertisement.

When one buys a stallion he should get a good one. One of the best stallions, and a good harness stallion as well—one that has taken many premiums in first-class contests is King Chester, 29, advertised in this issue. Read the advertisement. The time for breeding good horses is here and now.

The general impression among harness racing men last fall was that when Star Pointer wrecked his tendon at the Empire City track he would never be able to race again. The only power that ever passed the two-mile mark was sent back to Congressmen W. J. White's Two-Minute Stock Farm, where he has been ever since, and was sent to rest in the inner paddock, with the result that he is now as sound as ever. His driver, McCleary, has driven him recently a number of times in 2:30, which is sufficient proof that he will race again.

Emulating the example of Lord Rosebery, whose ambition it was to become Prime Minister of England and win the Derby, the Hon. Joe Bailey has one eye on the United States Senate and the other on the Kentucky Futurity, the Derby of the American trotting turf. The Texas congressman has nominated this year the prospective produce of no less than twenty-two brood mares in the \$20,000 race for three-year-olds, to be trotted at the Kentucky Breeder's meeting in 1903. During the years of depression in horse breeding Mr. Bailey did a lot of clever shopping among the public sales and the breeding farms, until he now owns a collection of trotting stock which the critics describe as "all cream," and bought at "skim-milk" prices.

John R. Gentry is always raced in an open bridle and easy side check by W. J. Andrews. A lot of other horses might act better with this easy and simple head rigging. Some would go better with no check at all. This was the case with Ralph Wilkes. He would fight an over check, and when he came to Williams as a two-year-old he wore a check as strong as a trace. "What is that big strap for?" asked Williams of the groom who accompanied him. "If it is any lighter he'll break it," answered the swiney "Jimmie Crot." said Williams, "he'll break no checks while he is here. Take it off, and the colt went steady and with his head free, and took a record a few days later to high wheel of 2:15. He won all his races after this without a check, and no Wilkes trotter in the male line has ever beaten his 2:00%.

THE WEIGHT RULE.

Editor RURAL WORLD: I confess that it is with great reluctance that I take issue with Mambrino, Jr. I can expect from him only the same treatment he deems out to others. He does not attempt to argue a point, but assails with all kinds of missiles all who differ with him. Such tirades of abuse as he has used towards the two trotting associations I have never read in any other journal, and the worst criminals could not have been assailed more viciously. I have enough of the milk of human kindness in my breast to believe the officers of these associations have done what they conscientiously believed was for the best interests of the trotting turf. They may not have always done what was for the best, but I believe they always did what in their judgment was thought to be for the good of all concerned. The members of the boards are men of high character, and to put any other construction on their acts would belie their life histories. It is very easy to sling mud. It is very easy to assualt any system much easier than to adopt one and particularly a perfect one. It has been said that an ass can bray at a Bunker Hill monument, but could not erect one.

But I did not start out to say one word of this, only to give a reason for my installation in taking issue with Mambrino, Jr. He will probably launch his thunderbolts at me as he has been doing at all those he opposes, or who oppose him. I will simply say that I believe the weight rule is right as it now stands, without calling every man a fool or a rascal who differs with me. The reason for my opinion is that 150 pounds is about the average weight of men or drivers. Conditions in all contests should be made as equal as possible. A two thousand pound draft horse should be matched to pull against a draft horse of about the same weight, not against a pony. A one hundred and eighty pound boxer should not be matched against one of only one hundred and twenty pounds weight. With running horses the greatest pains are taken to equalize weight and weight conditions. The same effort has been made to equalize conditions in trotting races, and they have adopted the rule that the weight of an average-size man—150 pounds—should be the proper weight for contestants to carry. Some are a little over and some under this weight. Those

under this weight must make it up to the weight of an average-sized man, and those weighing more must go as light as they can and be handicapped by their overweight. While this rule does not make an equal contest in all cases it comes as near as possible.

Suppose this equitable rule was abolished, what would be the result. A fraction of a second is sometimes so important in a race that every horse owner would be looking out for the lightest weight driver that could be found. We would find at all our trotting stables, just as we find now at our running stables, a lot of dwarfs, to drive the races. It would be a splendid thing for the little fellows like Tod Sloan, or those still lighter, but the vocation for men of manhood, for the average weight driver would be gone. What sort of equality would there be in a contest with the rules permitting one driver weighing 100 pounds contesting against a driver weighing 150 or 180 pounds? Is there any equality in trotting this way? Do we want to offer a premium for dwarfs? If so abolish the rule that is in existence for 50 years, and under which trotting and trotting races have gained such great success and distinction. I have no doubt every little fellow will favor the abolishment of this rule, while men of the average weight and manhood will say let the rule stand as it has always stood. It is just and right. It equalizes conditions. It prevents one man from getting a great advantage over another. In two-year-old contests it might answer to let down the bars, for the young things ought to be favored in every possible way.

Jackson Co., Mo. WILKES, JR.

MAMBRINO, JR.'S. GOSSIP.

Editor RURAL WORLD: According to promise in a recent article, I made the projected trip to Kahoka in quest of something to write about, for the deletion, or disgust—as they may be a mind to take it—of your million or so of readers. While "speering" around for news matter, as our Scotch friends would say, I had an eye out for business, in a small way and secured a new subscriber, and the renewal of an old one, which will keep "old reliable" before some new readers for another twelvemonth at least.

The revival of interest in trotting and pacing matters has given an impetus to breeding, and an increased demand for good horses of all kinds. The more speed and "looks," the better will be the compensation. There are other good horses owned in Kahoka, and as this article is already long enough, I will take another occasion to sound the praises of my old-time favorite Kahoka Boy, and a lot of other elegant stock belonging to our mutual friend, Geo. W. Miller, of the pioneer breeders of standard horse stock in Clark County, Mo.

L. E. CLEMENT'S GOSSIP.

Editor RURAL WORLD: On my return from a trip among some of the horsemen, I found "The Kentucky Stock Farm." It has awakened from a Rip Van Winkle rest and seems to be as much surprised as was the original Dutchman. The management when they went out of the active work knew that George Wilkes and his family were the popular and fashionable family. They wake up and expect to find things in the same condition as when they went into the somnambulistic condition. I take pages 5 and 9 of March 22, 1900, and among the news items I find "C. A. Smith, Blue Earth, Minn., has bought from W. R. Jamier the three-year-old stallion Malo, by Potential. Malo is a full brother to Potential (3), 2:37%, and three others in the list. He is a 16-hand rich bay and a born trotter." It is true Minnesota is not in the horse district of Kentucky. On the same page I find "The three-year-old Poten, by Alexander's Abdallah, has a list of 10 sons that are sires, and they were sired by six different sires, and by different lines of breeding, three by Woodford Mambrino, three by Belmont and two by his son Wedge, Lord Russell. The 10 have to the close of 1898 sired 67 trotters and 25 pacers, against 55 trotters and 25 pacers for the sons of Elector and Beautiful Bells. Primrose will attract more attention in the next few years for the records show her almost or quite alone in results on all the diverging lines of Woodburn farm breeding.

The readers of the RURAL WORLD probably noted last week the new advertisement of Valley Grove Stock Farm.

The brood mares are not surpassed by any farm in the United States. Seven daughters of Norval, one of them out of a sister of Platinus, the idol of Des Moines, Iowa, a daughter of Cathedral, possibly the best daughter of George Wilkes. I

wish more of our farms were as well represented in that line.

All have used judgment in the selection of sires, but I know of few, if any who have been so fortunate in the selection of dams. You may have the best sires in the world, and without dams you have nothing to sell. It will now take almost a lifetime to breed up from common stock. Yet the first cross makes a better farm horse than the colts of anything bred beyond the Atlantic. If Mr. Curl will come to Southwest Missouri we will show him his ammunition is wasted, for we have as good stock as the sun shines on. We have tried the draft horse and he doesn't fill the bill.

MONGOLD, 2825, AT HOLDEN, MO.

Mr. R. C. Brownlee, of Holden, Mo., has secured from the Colman Stock Farm, St. Louis, Mo., the bay trotting stallion Mongold, 2825, sired by Allandor, 2:19%, the sire of Dick Hubbard, 2:09%, and 25 others that have beaten 2:30. Allandor is by Onward, 2:25, the sire of 15 that have beaten 2:30, and he is the son of George Wilkes, 2:22, the sire of \$2 in the list and the founder of the great Wilkes family, and he is the son of Rysdyk's Hambletonian.

The dam of Mongold is Monitor Rose,

by Monitor, 1327, the sire of Geo. Benner, 2:17%; Queen T., 2:20%; Monitor Chippy, 2:27, and many other fast trotters, and is also the sire of the dams of Teah, 2:14; Jim Rumey, 2:16%; Major Gentry, 2:24%; etc. His second dam is Bay Dixie, by Abdallah, Jr. (the dam of Southern Lily, 2:27%; Monitor Chippy, 2:27; and Monarch, 2:27), and he is the sire of four in the list, and the son of Alexander's Abdallah, the sire of Goldsmith Maid, 2:14, and the founder of one of the greatest trotting families. The third dam of Mongold is Dixie, 2:30 to wagon, by Pilot, Jr., the dam of Dixie Sprague, 2:25, as well as Bay Dixie, and the granddam of Stonewall, 2:21%; Baroness, 2:30; Why Not, 2:29%; Graydon, 2:29%; Cornwall, 2:29; and full sister to Tackie, 2:26, the dam of a number in the list, and the dam of the number beaten 2:30. The fourth dam is

The next week the leading editorial over the signature of Iococast, says: "In a recent letter to the 'Kentucky Stock Farm' a valued correspondent says, 'In the last number of the 'Stock Farm' Iococast would teach us that of all the trotting families now before the public it would be well to discard everything but the two families, Wilkes and Elector.' I think others than the 'valued correspondent' would get the same idea. Still it would seem that there are some breeders outside of Kentucky who are not so particular if the animals they breed are Wilkes or Elector. Outside of these families we have found an Alis, 2:30%; John Nolan, 2:08; a green trotting stallion called Poindexter, at the recent Woodstock, 2:20%. Dam Maud (2), 2:30, by Young Hiram, son of Hiram Woodruff. This mare Maud, in brood mare condition, weighed thirteen hundred and eighty pounds. She is one source at least from which J. W. B. 3233 gets his size, and I believe it is an admitted truism that the weight of an average-size man—150 pounds—should be the proper weight for contestants to carry. Some are a little over and some under this weight. Those

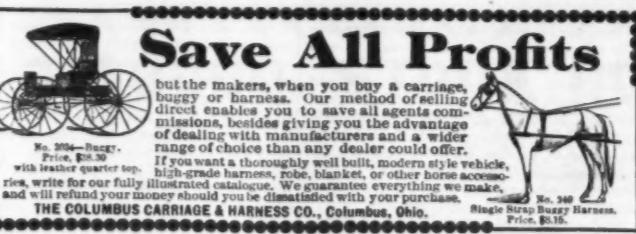
under this weight must make it up to the weight of an average-sized man, and those weighing more must go as light as they can and be handicapped by their overweight. While this rule does not make an equal contest in all cases it comes as near as possible.

Suppose this equitable rule was abolished, what would be the result. A fraction of a second is sometimes so important in a race that every horse owner would be looking out for the lightest weight driver that could be found. We would find at all our trotting stables, just as we find now at our running stables, a lot of dwarfs, to drive the races. It would be a splendid thing for the little fellows like Tod Sloan, or those still lighter, but the vocation for men of manhood, for the average weight driver would be gone. What sort of equality would there be in a contest with the rules permitting one driver weighing 100 pounds contesting against a driver weighing 150 or 180 pounds? Is there any equality in trotting this way? Do we want to offer a premium for dwarfs? If so abolish the rule that is in existence for 50 years, and under which trotting and trotting races have gained such great success and distinction. I have no doubt every little fellow will favor the abolishment of this rule, while men of the average weight and manhood will say let the rule stand as it has always stood. It is just and right. It equalizes conditions. It prevents one man from getting a great advantage over another. In two-year-old contests it might answer to let down the bars, for the young things ought to be favored in every possible way.

DR. S. A. TUTTLE, Sole Proprietor, 82 Beverly St., Boston, Mass. Beware of all so-called Elixirs, name generic but Tuttle's.

COLMAN'S RURAL WORLD, APRIL 4, 1900.

Save All Profits



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The Pig Pen.

For that Cough
TRY ALLEN'S
Lung Balsam.

You will be pleased with the result. It contains no opium in any form, and as an expectorant it has no equal. Mothers will give their children for whooping cough and croup. All druggists sell it. Ask for ALLEN'S Lung Balsam. and be sure you get it.

Price, 25c, 50c and \$1.00 a bottle.

STICK BY THE HOG.

No live stock ever did so much in the same length of time to lift earnest and capable friends out of the slough of financial despond as hogs have, writes Theodore Lewis in "Farm, Stock and Home." And it requires but little capital to make a start in an industry that begins to pay dividends in a few months. From one to four sows will be a good starter, considering the rapid increase of this animal, and their progeny will be ready to harvest in from 9 to 11 months at the outside. Forty-seven years ago the writer carried his first sow pig home in a sack and on his back five miles and paid \$1 for it because the sows were then at a price in those days, an enormous price in those days. It was the best investment he ever made. It was the first step toward future prosperity, and the ease now enjoyed in old age. He had not the guides, the counsel and advice within easy reach of all farmers now. He had to learn the art of properly feeding, housing and breeding in the costly school of experience. But he persevered. Failure, calamity, even became really valuable lessons, and must now be credited with much of subsequent success. But he never made the fatal mistake of going in and out of the hog business as prices went up and down, and thus he escaped one rock that wrecks so many who adventure upon this industry.

PRICES OF HOGS FOR 5 YEARS.

The following table, taken from the Cincinnati "Price Current," shows the number of hogs packed in the West during the winter seasons of 35 years, and the average cost per hundred pounds. The figures for 1886-1900 are not complete, and the figures for seasons prior to 1856 are estimated:

Season.	No.	Cost.
1856-57.	8,675,000	\$4.29
1858-59.	9,720,145	2.52
1857-58.	8,440,785	3.58
1859-60.	6,949,090	3.20
1860-61.	7,191,520	4.28
1861-62.	4,884,882	6.54
1862-63.	4,633,520	2.26
1863-64.	7,761,216	3.91
1864-65.	6,287,257	2.54
1865-66.	6,662,302	2.66
1866-67.	5,482,852	4.29
1867-68.	5,921,181	5.04
1868-69.	6,208,909	2.66
1869-70.	6,208,995	2.66
1870-71.	6,469,230	5.18
1871-72.	5,402,064	3.22
1872-73.	6,131,212	2.91
1873-74.	6,208,995	2.66
1874-75.	6,909,456	4.64
1875-76.	6,369,452	4.18
1876-77.	7,480,648	2.85
1877-78.	6,161,308	4.64
1878-79.	5,101,308	7.74
1879-80.	4,880,135	7.05
1880-81.	5,566,226	6.66
1881-82.	5,499,200	7.43
1882-83.	5,114,114	5.24
1883-84.	4,831,558	1.16
1884-85.	3,685,251	5.22
1885-86.	2,635,312	9.22
1886-87.	2,489,763	4.57
1887-88.	2,489,764	4.26
1888-89.	2,490,764	5.03
1889-90.	2,490,791	5.03
1890-91.	1,785,955	9.34
1891-92.	2,625,779	11.46
1892-93.	1,785,955	10.50
1893-94.	4,080,520	3.36
1894-95.	2,895,696	2.42
1895-96.	2,155,702	4.57
1896-97.	2,022,229	4.13
1897-98.	965,552	2.89
1898-99.	2,210,778	1.81
1899-00.	1,818,468	4.75
1900-01.	2,489,602	6.90
1901-02.	1,818,468	4.75
1902-03.	2,534,770	3.35
1903-04.	2,201,110	4.81
1904-05.	1,182,846	3.56
1905-06.	1,378,967	5.90
1906-07.	1,560,000	12.12
1907-08.	1,560,000	2.89
1908-09.	1,710,000	2.60
1909-10.	2,825,000	2.85
1910-11.	940,000	2.45
1911-12.	790,000	2.45
1912-13.	1,245,000
1913-14.	675,000

POLAND CHINA RECORDS.

How can one secure a record of the leading Poland-China hogs of to-day and their antecedents? Does the State Swine Breeders' Association keep and publish the records of the hogs registered? Who are the officers of the association and who are eligible to membership?

ALBERT M. PATRICK,
Jefferson Co., Mo.

There are a number of Poland-China Record Associations which publish pedigree of registered hogs. One of these is the American Poland-China Record Co., of which W. M. McFadden, West Liberty, Iowa, is the secretary. Another is the Standard Poland-China Record Association, of which Geo. F. Woodworth, Maryville, Mo., is the secretary.

The secretary of the State Swine Breeders' Association is F. H. Schoeler, Rockport, Mo. This association does not publish records. Anyone interested in hog breeding can become a member. For further particulars write to the gentleman named.

PIG PEN POINTERS.

THE L. A. SPIES BREEDING CO., St. Jacobs, III., is doing a thriving business in Poland-Chinas. Only the best strains of this popular breed are handled and nothing sent out but what is all right in every respect. The herd bears are U. S. Chief Tecumseh 2nd, 2276; Prince Hadley, 15982, and Expector, 21921, and out of the finest sows the best may be had.

L. A. SPIES BREEDING CO., St. Jacobs, III.

POLAND-CHINAS.

For sale young stock to buy for breeding. Prices reasonable.

J. H. WAGENBERG, Enfield, Ill.

"OAKWOODS" POLAND-CHINAS.

For sale: Early spring hogs, blood pigs, gos, geese and gos, birds to four boards.

Box 25. B. P. Books, \$1 to \$2 each. Allstock.

E. S. WILLIAMSON, Centralia, Boone Co., Mo.

SOLD OUT.

All but a few August pigs. Outlook good for coming crop of pigs.

S. G. Richards, Sturgon, Mo.

POLAND-CHINAS.

Guaranteed pedigree and individual merits combined.

E. L. OGREN, Carroll, White Co., Ill.

DUROC-JERSEYS.

Registered stock. Pigs best breeding. Prices reasonable.

J. E. HAYNES, Ames, Ill.

Duroc Jersey and Berkshire Hogs!

Breeding. Satisfaction guaranteed or you may return at my expense.

S. C. WAGENER, Pana, Ill.

Berkshire Sows

Up to date in breeding and quality. Some strictly good stuff cheap. It will pay you to get prices. Add. W. E. NEAL, Oak Grove, Bridgeport, Ill.

LARGE ENGLISH BURKSHIRE HOGS.

Tousous Geese, B. P. Rock and Rose Combed White Leghorn Chickens.

Eggs, \$1 setting. J. E. BURKHARD, Muncie, Indiana, Phillips Co., Mo.

JOHN MORRIS, CHILLICOTHE, MO.

Breeder of Shorthorn Cattle, Berkshire Hogs, Corn-wold and Shropshire Sheep. Prices reasonable.

\$10 BURKSHIRES \$10

For sale nice lot of pigs by Artful Stew No. 502350. A few hogs, 100 lbs. and up, for breeding. The best of pigs and the best of breeding. Come and see or write me.

A. L. MOSS, Mt. Vernon, Illinois.

PRAIRIE GROVE HERD OF BURKSHIRES

Straight Gentry stock. Same Duke and Dandy at head of herd. Pigs for sale as sows, gos, and pigs.

Bred sows have for sale, and a few male pigs.

J. T. MOORE, Speed, Mo.

Rose Hill Herd

For sale: Duroc Jersey Hogs. Bred ready for service for fall pigs and March pigs for sale. Prices reasonable.

S. Y. THORNTON, Blackwater, Mo.

Old as the Hills

are the pains and aches of

RHEUMATISM

NEURALGIA

SCIATICA

Sure as taxes is the cure of them by

St. Jacobs Oil

the pain and aches of

the pains and aches of

Use Rock Salt for Brine, Pickles, Hides, Meats, Ice Cream, Ice Making, Fertilizing and Refrigeration.

USE

Kansas Lump Rock Salt

GROUND ROCK SALT FOR STOCK. MINES AND WORKS, LYONS & KANOPOLIS, KAN.

PUREST, MOST HEALTHFUL, BEST. HIGHEST AWARDS AND MEDALS FOR PURITY. WORLD'S EXPOSITION, CHICAGO, 1893; TRAN-MISSISSIPPI EXPOSITION, OMAHA, 1899.

WESTERN ROCK SALT CO., ST. LOUIS, MO.

The Markets

WHEAT—No. 2 red nominally 75¢/buc; this and sold at 72¢ E. side; No. 3 red 70¢/buc for car and 71¢/buc for choice sacks; No. 1 winter 62¢/buc; No. 2 hard at 65¢/buc; No. 3 soft 68¢/buc; No. 4 soft 70¢/buc; No. 2 white at 68¢; No. 3 soft 69¢/buc.

CORN—Firms back the demand extending to 10¢/buc. On car, 70¢/buc; 88¢/buc; No. 2 at 82¢; No. 4 at 86¢; 2 soft 70¢; No. 2 yellow at 88¢; No. 2 white at 88¢; No. 3 do at 88¢.

OATS—Strong and higher, best market for good grades of white. On trk.—No. 2 at 75¢/buc for rust proof to 82¢; No. 3 at 85¢/buc; No. 4 at 24¢/buc; 3 Northern 60¢/buc; No. 2 white at 28¢/buc; No. 3 do at 27¢/buc; No. 4 do at 30¢/buc.

RYE—Quiet. Grade No. 2 was held at 8¢, but the best bid only 5¢.

MILLEFEEED—At mill bran now selling at 70¢/buc.

HAY—Timothy \$12.50/buc for choice; \$11.50/buc for No. 1; \$10.50/buc for No. 2; \$9/buc for No. 3. Prairie—\$8.50/buc for choice; \$8.50/buc for No. 1; \$7.50/buc for No. 2. Good to choice choice.

GRASS SEED—Clover \$5.00 for poor to 27.75¢ for choice; red top 50¢/buc; German millet \$1.50/buc for choice; Hungarian 75¢/buc; 100¢/buc; Timothy 25¢/buc.

FLAXSEED—Nominally \$1.25.

STOCK PEASE—Whipworm, \$1.25 per bu.

PRODUCE.

EGGS—Choice, fresh eggs sold at 8¢/doz. less off. Duck eggs were steady at 12¢/doz.

BUTTER—Everything in the way of butter was dull and lower, as offerings were liberal and the demand light.

Creamery—Extra 22¢/buc; first 20¢/buc; odds 18¢/buc. Dairy—first 16¢/buc; grease 4¢/buc. Process 2¢. Lard—packed—Extra 18¢/buc; first 17¢/buc.

Country—Near by roll 15¢; inferior roll 13¢; 17¢.

CHEESE—Quic 12¢/buc; single 12¢/buc; Y. A. 12¢. Illinois—Twins 9¢/buc; singles at 9¢/buc; Y. A. 9¢/buc; N. Y. full cream 12¢/buc; Y. A. 11¢/buc; Swiss 12¢/buc; black 11¢/buc. Foregoing are jobbing prices from stores.

WOOL—Market wholly nominal; nothing doing.

Meat—Pork and Illinois—

Med. combing 22¢/buc

Med. clothing 22¢/buc

Braided and low 21¢/buc

Bury and clear mixed 20¢/buc

Bury 19¢/buc

Hard bury 18¢/buc

Light fine 17¢/buc

Heavy fine 16¢/buc

Med. (fleeces) 22¢/buc

Med. (loose) 19¢/buc

Bury 18¢/buc

Hard bury 17¢/buc

Fall clip 16¢/buc

Tubewashed—

No. 1 33¢/buc

No. 2 25¢/buc

Bury 22¢/buc

Black from 3¢ to 8¢ per lb. less than above prices.

LIVE POULTRY—Market easier for 10¢/buc. Pigeons 12¢/buc. Turkey—dull and easier. Turkey—Average receipts 9¢; heavy toms 7¢. Chickens—Hens 8¢; rough and heavy roosters 4¢; broilers 12¢. Ducks 8¢. Live pigeons 5¢/buc. Geese—Goslings 25¢. Chickens quoted at \$1.50/buc. Plucked geese 5¢.

DRESSED POULTRY—Market dull and nominal. We quote as follows: Sealed and packed—turkey 12¢/buc; fowl and turkey—Hens 10¢; gobblers 12¢; Chickens—Chicks 6¢. Geese 6¢/buc.

POULTRY—Market in bulk on trk.

Birds 12¢/buc for common to fair, 25¢/buc for choice to fancy; fowl at 26¢/buc for common to fair, and 34¢/buc for choice to fancy; fancy bright smooth Michigan run 35¢/buc; fancy white 36¢/buc according to quality; frosted, combed, infected scabby and foot stock geese.

BROOMCORN—Nominally \$1.25 to \$1.50 per ton.

ROOTS—Ginseng \$3.50/buc. 50¢ per lb. for small roots; 75¢ per lb. for 10¢/buc. pink 13¢/buc; large golden seal 40¢/buc; May apple 26¢/buc; snake 27¢; black 26¢/buc; angelica 36¢/buc; wahoo bark of root 3¢; bark of tree 26¢/buc; blood 25¢; blueflag 3¢; skull cap 25¢/buc.

HONEY—Comb at 10¢/buc; white, inferior, dark and broken go for less. Extracted and strained in pbs. 60¢/buc and in small jars 75¢/buc.

COTTON—Local market quiet and 1-16 lower; sales none.

Ordinary 8-18¢

Good very 10-18¢

Love, middling 9¢

Middling 9¢

Good middling 9¢

Middling fair 9¢

Tinges and stains 10¢/buc below white.

A WOMAN'S COMMENTS.

EDITOR RURAL WORLD: We have decided it is cheaper to buy our brooms than to raise the broom corn and make them (see RURAL WORLD of February 10), and not half so hard on a weak woman's back—for the women would have the brooms to make when made at home. Though they may be 35 cents apiece, I would rather read a good article in some good agricultural paper telling how to make two blades of grass grow where one grows before than to spend the time making brooms.

"Farmer" says: "Butter is not a necessity." It is said nature does not make mistakes. The natural appetite of nine in every ten persons will cause them to relish good butter from infancy to old age; unless disgusted with it as the writer was. Once, when quite small, I called on the hired girl for bread and butter. She became weary of me and gave us lard on bread to stop my teasing. The result was a deranged stomach and disgust for butter ever after. This is not so with pure butter. Children will eat it without bread and experience no ill effects from it. No matter how perfect the substitute, it is never the genuine article.

S. F. Gillespie says: "The sons of the soil forsake their plows for the city with its pestilence and other misfortunes." If those same sons could once realize the importance of their calling they would not do as they are doing. The writer was in a dry goods store sometime ago and a customer came in and informed the merchant of the intention of several parties to locate in the same town. The merchant said, "Let them come; they will not stay. Get a few good farmers around this place and we can support them. Without the farmers they can't make a living here." That merchant realized his dependence on the farmer. It is the farmers that support the cities, instead of cities supporting the farmers. While the farmer can go back to the primitive

way of living and eke out a livelihood, though it would be a hard one independent of the city, what would become of the city people if cut off from the country?

I think it best as it is, mutual dependence between city and country. A recognition of this will solve many problems.

One more comment: The editor seems to question the fact that there is a sameness in country life (not criticizing the editor) as mentioned by one of our writers. If the editor will take himself 50 or 100 miles from the city he will declare "the half was never told." He would deem himself insane if required to stay in such a place; never a newspaper, or, if any, only one political paper; no agricultural papers, no good books, no good schools, nothing. If you present a farmer's paper to the people they turn up their noses and say: "It only tells about pigs and chickens." How can such men be educated out of their log ideas when they will not read a line unless it is dead, Gold or Silver Standard?

MRS. M. E. WARREN.

Cherokee N., Ind. Ter.

LIVE STOCK.

WHEAT—Heavy Draft—Common to good \$9 to \$140; choice to fancy \$150 to \$200.

Drivers—Common to good \$75 to \$150; bushels of 100 to 150; coach horses \$150 to \$200.

Saddlers—Common to choice \$60 to \$125; choice to fancy \$125 to \$200.

Chum—250 to 1,400 lbs.—Common to good \$70 to \$100; choice to extra \$100 to \$120.

Southern Horses—Common to good \$50 to \$85; choice to fancy \$85 to \$120.

CORN—Firms back the demand extending to 10¢/buc. On car, 70¢/buc; 88¢/buc; 100¢/buc; 112¢/buc; 120¢/buc; 128¢/buc; 132¢/buc; 140¢/buc.

MULES—(For horse mules 4 to 7 years old).

14 hands, extreme range ... \$30.00 to \$150.00

14 hands, bulk of sales ... 40.00 to 60.00

14 hands, extreme range ... 40.00 to 60.00

15 hands, bulk of sales ... 50.00 to 60.00

15 hands, extreme range ... 67.50 to 87.50

16 hands, bulk of sales ... 60.00 to 70.00

16 hands, extreme range ... 75.00 to 95.00

16 to 18 hands, extreme ... 95.00 to 160.00

16 to 18 hands, bulk of sales ... 110.00 to 125.00

18 hands, extreme range ... 125.00 to 150.00

18 hands, bulk of sales ... 130.00 to 150.00

18 hands, extreme range ... 140.00 to 160.00

19 hands, extreme range ... 150.00 to 175.00

20 hands, extreme range ... 160.00 to 180.00

21 hands, extreme range ... 170.00 to 190.00

22 hands, extreme range ... 180.00 to 200.00

23 hands, extreme range ... 190.00 to 210.00

24 hands, extreme range ... 200.00 to 220.00

25 hands, extreme range ... 210.00 to 230.00

26 hands, extreme range ... 220.00 to 240.00

27 hands, extreme range ... 230.00 to 250.00

28 hands, extreme range ... 240.00 to 260.00

29 hands, extreme range ... 250.00 to 270.00

30 hands, extreme range ... 260.00 to 280.00

31 hands, extreme range ... 270.00 to 290.00

32 hands, extreme range ... 280.00 to 300.00

33 hands, extreme range ... 290.00 to 310.00

34 hands, extreme range ... 300.00 to 320.00

35 hands, extreme range ... 310.00 to 330.00

36 hands, extreme range ... 320.00 to 340.00

37 hands, extreme range ... 330.00 to 350.00

38 hands, extreme range ... 340.00 to 360.00

39 hands, extreme range ... 350.00 to 370.00

40 hands, extreme range ... 360.00 to 380.00

41 hands, extreme range ... 370.00 to 390.00

42 hands, extreme range ... 380.00 to 400.00

43 hands, extreme range ... 390.00 to 410.00

44 hands, extreme range ... 400.00 to 420.00

45 hands, extreme range ... 410.00 to 430.00

46 hands, extreme range ... 420.00 to 440.00

47 hands, extreme range ... 430.00 to 450.00

48 hands, extreme range ... 440.00 to 460.00

49 hands, extreme range ... 450.00 to 470.00

50 hands, extreme range ... 460.00 to 480.00

51 hands, extreme range ... 470.00 to 490.00

52 hands, extreme range ... 480.00 to 500.00